AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (Original) A start signal outputting circuit having an RF/DC convertor circuit for converting a high frequency power (RF) into a direct current potential (DC) and outputting it, said RF/DC convertor circuit comprising:

a device working as a diode;

a first transistor connected to an anode side of said diode, for working as a high resistance by a positive potential being applied thereto; and

a second transistor inserted between a cathode side of said diode and ground, for working as a high resistance by a positive potential being applied thereto.

2. (Original) A start signal outputting circuit recited in claim 1, wherein said RF/DC convertor circuit further comprises a resonance circuit connected between said cathode side of said diode and ground for shorting with the high frequency power of a specified frequency.

3. (Original) A start signal outputting circuit having an RF/DC convertor circuit for converting a high frequency power (RF) into a direct current potential (DC) and outputting it, said RF/DC convertor circuit comprising:

a device working as a diode;

a first npn transistor having its emitter connected to an anode side of said diode and its base and collector to which a predetermined positive potential is applied;

a second npn transistor having its collector connected to a cathode side of said diode and its emitter connected to ground via a resistance;

a third npn transistor having its emitter connected to a base of said second npn transistor and its base and collector to which a predetermined positive voltage is applied; and

a resonance circuit connected between said cathode side of said diode and ground for shorting a specified frequency.

4. (Currently amended) A start signal outputting circuit recited in ~~any one of claims 1 to 3~~ claim 1, wherein said RF/DC convertor circuit further comprises a matching circuit provided on said anode side of said diode for obtaining matching with respect to an inputted high frequency power.

5. (Currently amended) A start signal outputting circuit recited in ~~any one of claims 1 to 3~~ claim 1, further comprising a counterpart circuit of the same construction as said RF/DC convertor circuit, of which an anode of a device working as a diode is provided with a d.c. potential based on the positive potential given to said RF/DC convertor circuit, so that a differential RF/DC convertor part is formed by the said RF/DC convertor circuit and said counterpart circuit.

6. (Original) A start signal outputting circuit recited in claim 5, further comprising:

a differential amplification part for carrying out a differential amplification of at least one stage for an output of said differential RF/DC convertor part; and

a low-pass filter disposed at least one of between said differential RF/DC convertor part and said differential amplification part and a later stage of said differential amplification part,

wherein outputs of said differential amplification part and low-pass filter transmit a band of below 1/1000 compared to a band of said high frequency power signal.

7. (Original) A start signal outputting circuit recited in claim 6, wherein a transfer function of a part composed of said low-pass filter and said differential amplification part has a characteristic of monotonous decrease with frequency of a high frequency signal.

8. (Original) A start signal outputting circuit comprising:

a RF/DC convertor part for converting a high frequency signal of a desired frequency into a d.c. signal (RF/DC converting) ; and

a low-pass filter and low-pass amplifier for transmitting a band of below 1/1000 compared to a specified band of said high frequency signal.

9. (Original) A start signal outputting circuit recited in claim 8, wherein a transfer function of a part composed of said low-pass filter and low-pass amplifier has a characteristic of monotonous decrease as a whole with frequency of said high frequency signal.

10. (New) A start signal outputting circuit recited in claim 3, wherein said RF/DC convertor circuit further comprises a matching circuit provided on said anode side of said diode for obtaining matching with respect to an inputted high frequency power.

11. (New) A start signal outputting circuit recited in claim 3, further comprising a counterpart circuit of the same construction as said RF/DC convertor circuit, of which an anode of a device working as a diode is provided with a d.c. potential based on the positive potential given to said RF/DC convertor circuit, so that a differential RF/DC convertor part is formed by the said RF/DC convertor circuit and said counterpart circuit.

12. (New) A start signal outputting circuit recited in claim 10, further comprising:

a differential amplification part for carrying out a differential amplification of at least one stage for an output of said differential RF/DC convertor part; and

a low-pass filter disposed at least one of between said differential RF/DC convertor part and said differential amplification part and a later stage of said differential amplification part,

wherein outputs of said differential amplification part and low-pass filter transmit a band of below 1/1000 compared to a band of said high frequency power signal.

13. (New) A start signal outputting circuit recited in claim 10, wherein a transfer function of a part composed of said low-pass filter and said differential

amplification part has a characteristic of monotonous decrease with frequency of a high frequency signal.

14. (New) A start signal outputting circuit recited in claim 11, further comprising:

a differential amplification part for carrying out a differential amplification of at least one stage for an output of said differential RF/DC convertor part; and

a low-pass filter disposed at least one of between said differential RF/DC convertor part and said differential amplification part and a later stage of said differential amplification part,

wherein outputs of said differential amplification part and low-pass filter transmit a band of below 1/1000 compared to a band of said high frequency power signal.

15. (New) A start signal outputting circuit recited in claim 11, wherein a transfer function of a part composed of said low-pass filter and said differential amplification part has a characteristic of monotonous decrease with frequency of a high frequency signal.